

Appendix 3: Organic Carbon Maps

Figures A3.1 through A3.6 show the regional organic carbon (OC) response to the predominant weather pattern throughout the eastern U.S. in relation to the scrub fires. The regional scale pattern shows the increases in the organic carbon measurements from before the event in question with the average readings on May 18th. Increases in the readings correlating to the southerly air flow from May 24th to May 30th are indicative of the impact of the smoke plume. The readings then return to more baseline measurements on June 5th after the weather pattern shifts.

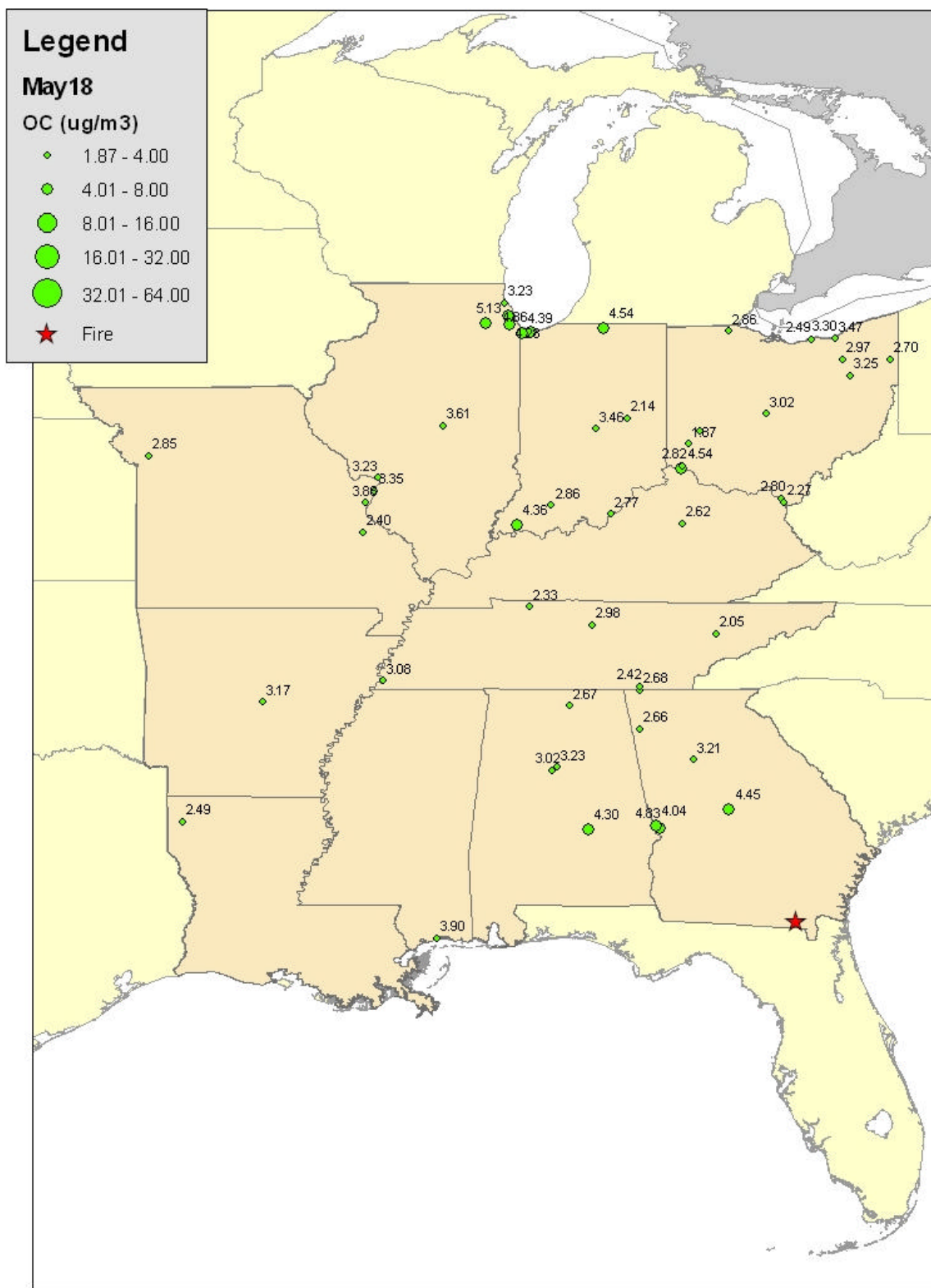
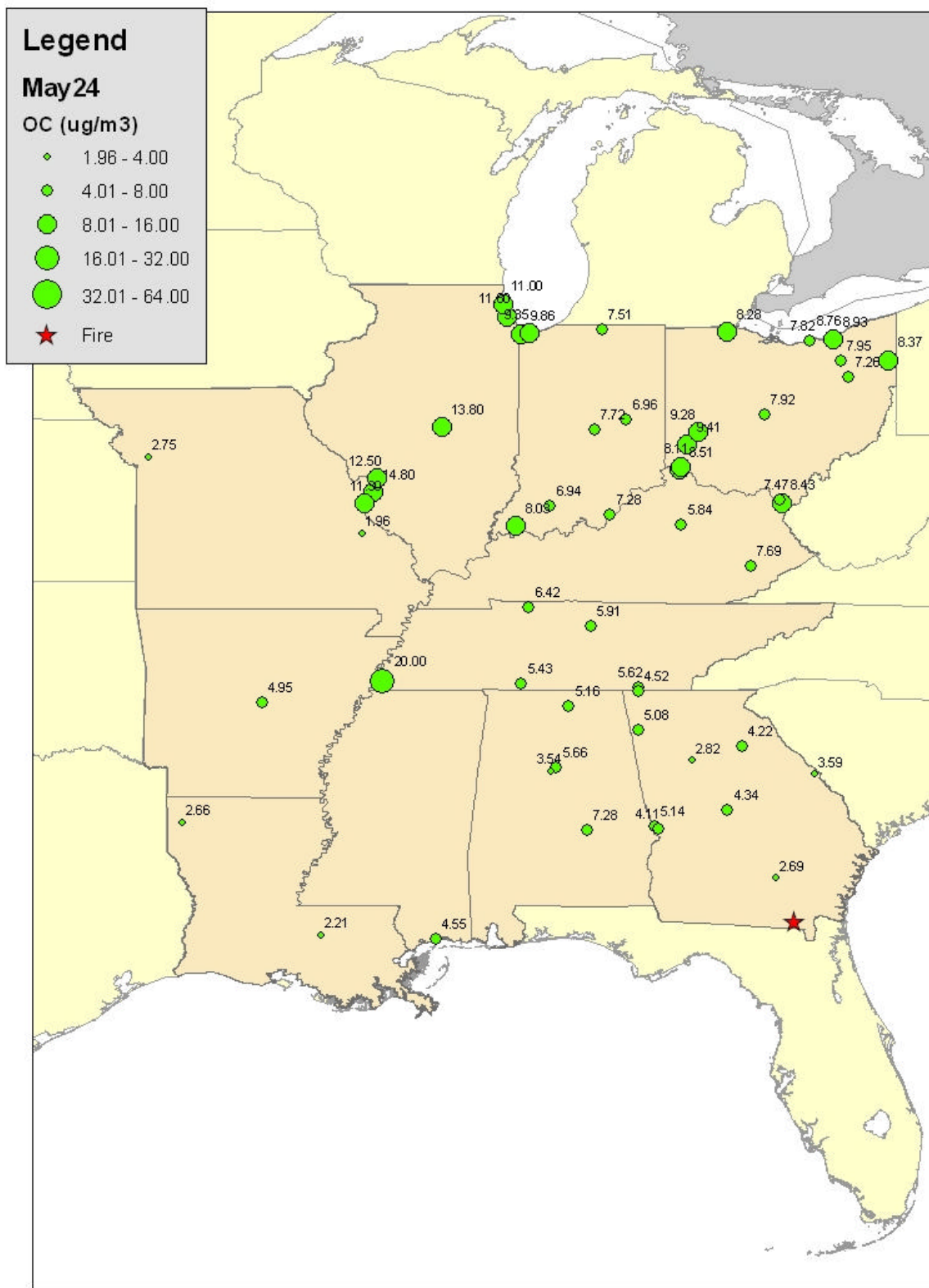


Figure A3.1: May 18th: The regional OC readings are closer to baseline data for each area.



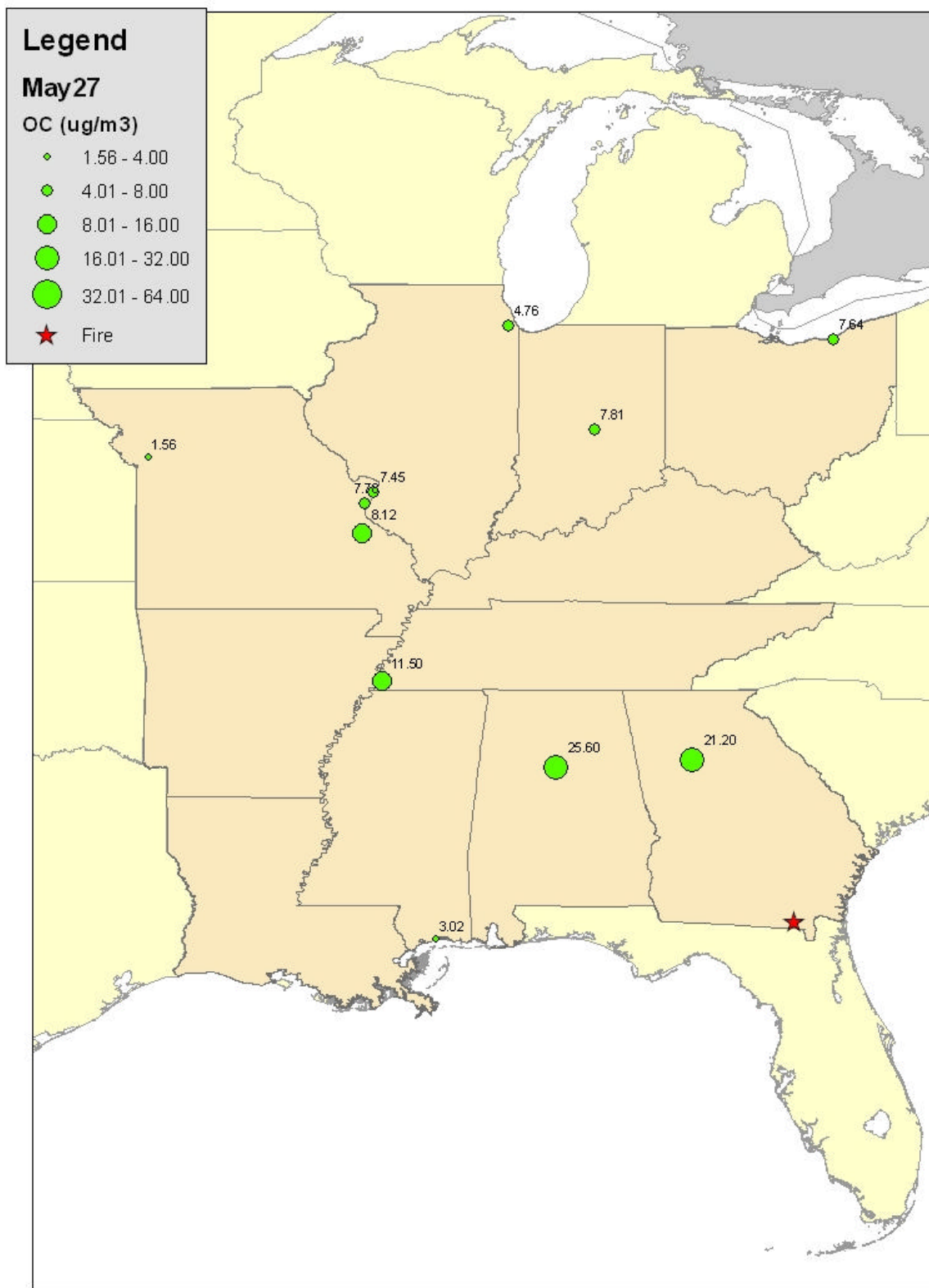


Figure A3.3: May 27th: The few 1-in-3 day OC readings show increases across the entire region.

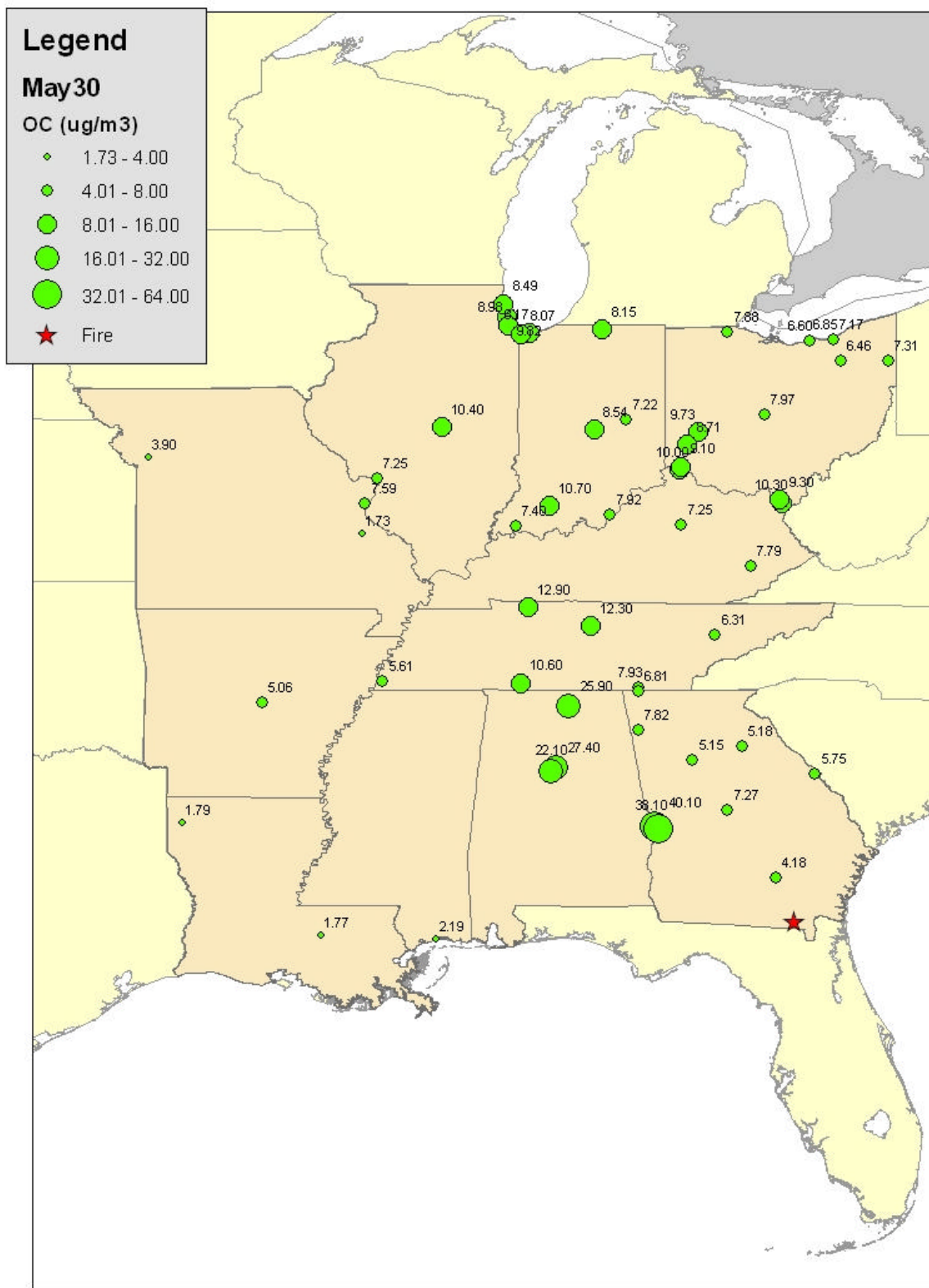


Figure A3.4: May 30th: The regional increase in OC is indicative of the smoke plume moving north from the fire and dissipating across the entire region affecting sites in multiple states.

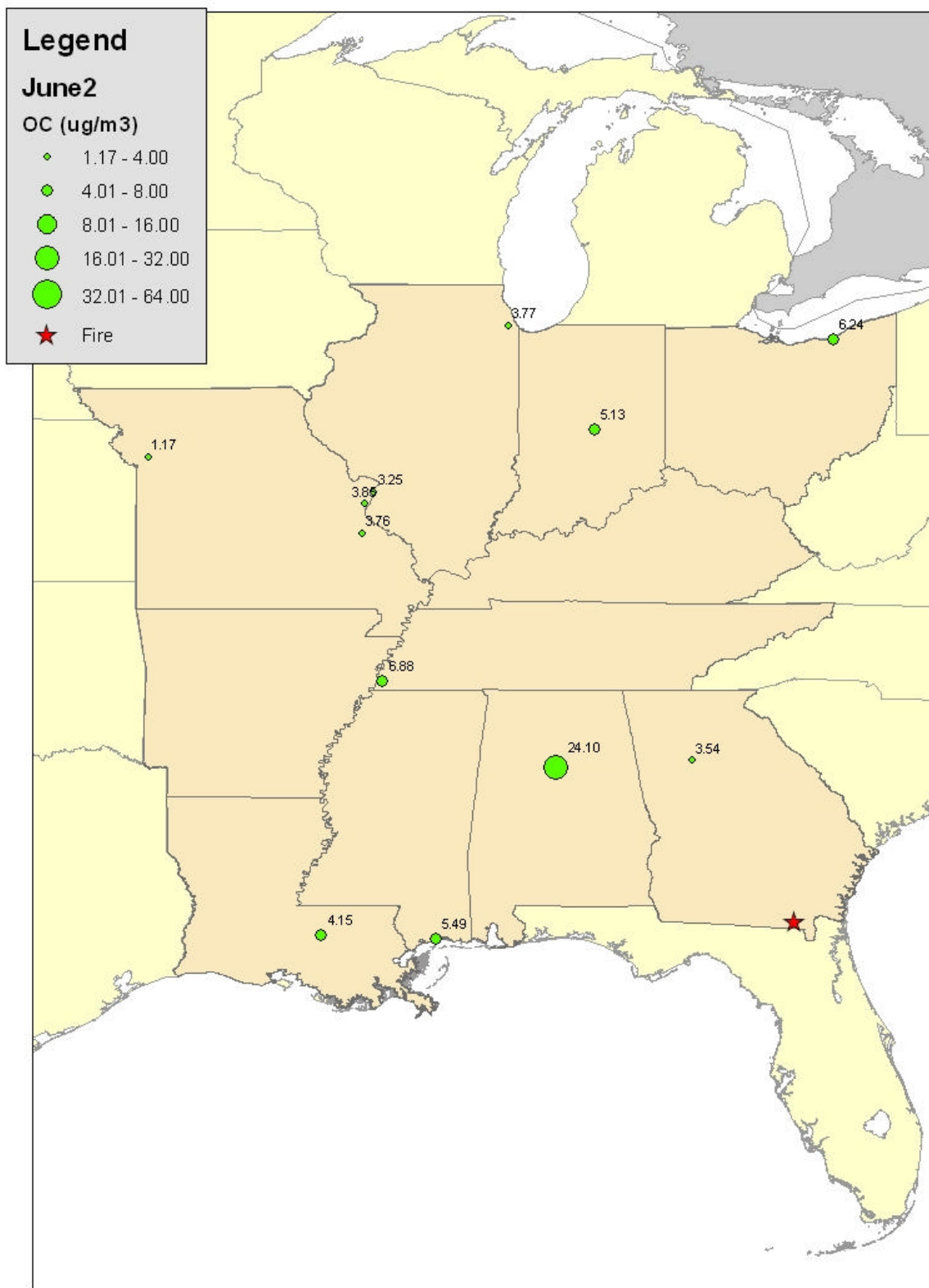


Figure A3.5: June 2nd: The few 1-in-3 day OC readings show a general decrease in OC across most of the sites.

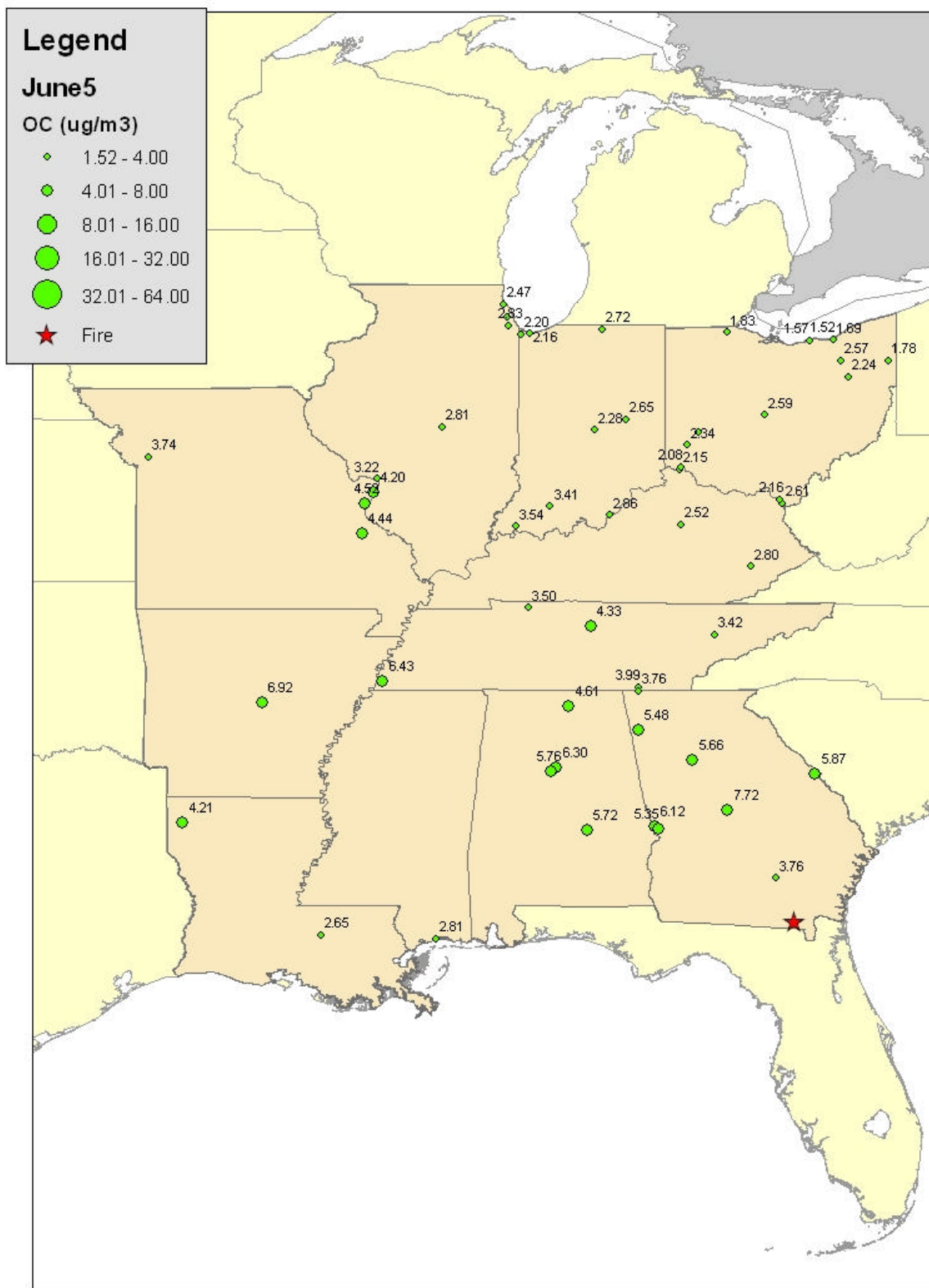


Figure A3.6: June 5th: The OC readings at all sites have returned to more baseline levels (as seen on May 18th) as the regional weather pattern again shifts.